

**WE CLAIM AS OUR INVENTION:**

1. A method for operating a magnetic resonance apparatus comprising the steps of:

initially setting a computer of a magnetic resonance apparatus for operating said magnetic resonance apparatus in a hybrid CSI sequence wherein predetermined magnetic resonance signal-emitting substances in a volume of interest will be excited to produce magnetic resonance signals for spectroscopic evaluation;

after initially setting said hybrid CSI sequence, automatically defining, in said computer, an increased volume that exceeds said volume of interest; and

automatically in said computer, modifying the initially set hybrid CSI sequence for causing a saturation volume, directly adjoining said volume of interest, to be saturated before said predetermined magnetic resonance signal-emitting substances are excited in said hybrid CSI sequence for preventing unwanted magnetic resonance signals from said increased volume from interfering with the magnetic resonance signals emitted by said predetermined magnetic resonance signal-emitting substances in said region of interest.

2. A method as claimed in claim 1 wherein said volume of interest has a side with a largest spatial extent, and comprising defining said saturation volume to be a volume directly adjoining said side of said volume of interest having said largest spatial extent.

3. A method as claimed in claim 1 comprising selectively setting said volume of interest via a user interface connected to said computer, in said initial setting of said hybrid CSI sequence.

4. A method as claimed in claim 1 comprising initially setting said hybrid CSI sequence to excite, as said predetermined magnetic resonance signal-emitting substances, a first substance at a first magnetic resonant frequency and a second substance at a second magnetic resonant frequency that is higher than said first magnetic resonant frequency.

5. A method as claimed in claim 4 comprising initially setting said hybrid CSI sequence to excite fat as said first substance and to excite water as said second substance.

6. A method as claimed in claim 4 comprising automatically defining said saturation volume with a thickness, directly adjoining said volume of interest, at least equal to a frequency difference between said second and first magnetic resonant frequencies.

7. A method as claimed in claim 4 comprising setting said hybrid CSI sequence for exciting said first and second substances at a mean magnetic resonant frequency between said first and second magnetic resonant frequencies for expanding said volume of interest on both sides of a spatial direction by a thickness corresponding to one-half of a frequency difference between said second and first magnetic resonant frequencies.

8. A method as claimed in claim 7 comprising automatically additionally increasing said thickness by a safety margin.

9. A method as claimed in claim 8 comprising increasing said thickness by said safety margin as a percentage of said frequency difference.

10. A method as claimed in claim 1 comprising allowing an additional saturation volume to be freely entered into said computer by a user via a user interface connected to said computer.

11. A method as claimed in claim 1 comprising operating said magnetic resonance apparatus with said computer to saturate said saturation volume using selective saturation pulses.